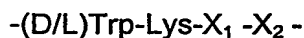


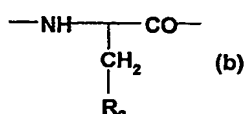
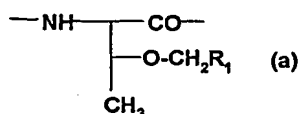
## CLAIMS

1. Use of a somatostatin analogue selected from KE108 and a somatostatin analogue comprising an amino acid sequence of formula I



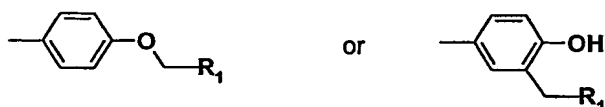
I

wherein  $X_1$  is a radical of formula (a) or (b)



wherein  $R_1$  is optionally substituted phenyl, wherein the substituent may be halogen, methyl, ethyl, methoxy or ethoxy,

$R_2$  is  $\text{---Z}_1\text{---CH}_2\text{---R}_1$ ,  $\text{---CH}_2\text{---CO---O---CH}_2\text{---R}_1$ ,



wherein  $Z_1$  is O or S, and

$X_2$  is an  $\alpha$ -amino acid having an aromatic residue on the  $C_\alpha$  side chain, or an amino acid unit selected from Dab, Dpr, Dpm, His, (Bzl)HyPro, thienyl-Ala, cyclohexyl-Ala and t-butyl-Ala, the residue Lys of said sequence corresponding to the residue Lys<sup>9</sup> of the native somatostatin-14, or a pharmaceutically acceptable salt thereof, in the preparation of a pharmaceutical composition for treating sleep apnea.

2. Use of a somatostatin analogue as defined in claim 1, or a pharmaceutically acceptable salt thereof, in the preparation of a pharmaceutical composition for improving cardiorespiratory function.
3. Use of a somatostatin analogue as defined in claim 1, or a pharmaceutically acceptable salt thereof, in the preparation of a pharmaceutical composition for improving airflow in upper airways.
4. Use of a somatostatin analogue as defined in claim 1, or a pharmaceutically acceptable salt thereof, in the preparation of a pharmaceutical composition for promoting paradoxical sleep.

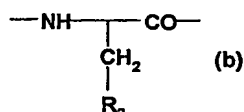
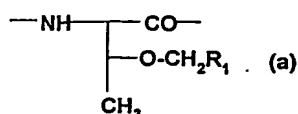
- 11 -

5. A method for the treatment of sleep apnea in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of a somatostatin analogue selected from KE108 and a somatostatin analogue of formula I



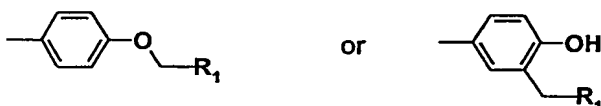
I

wherein  $X_1$  is a radical of formula (a) or (b)



wherein  $R_1$  is optionally substituted phenyl, wherein the substituent may be halogen, methyl, ethyl, methoxy or ethoxy,

$R_2$  is  $\text{---Z}_1\text{---CH}_2\text{---R}_1$ ,  $\text{---CH}_2\text{---CO---O---CH}_2\text{---R}_1$ ,



wherein  $Z_1$  is O or S, and

$X_2$  is an  $\alpha$ -amino acid having an aromatic residue on the  $C_\alpha$  side chain, or an amino acid unit selected from Dab, Dpr, Dpm, His, (Bzl)HyPro, thienyl-Ala, cyclohexyl-Ala and t-butyl-Ala, the residue Lys of said sequence corresponding to the residue Lys<sup>9</sup> of the native somatostatin-14, or a pharmaceutically acceptable salt thereof.

6. A method for improving cardiorespiratory function, particularly during sleep, in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of a somatostatin analogue as defined in claim 5 or a pharmaceutically acceptable salt thereof.
7. A method for improving airflow in upper airways, particularly during sleep, in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of a somatostatin analogue as defined in claim 5 or a pharmaceutically acceptable salt thereof.
8. A method for promoting paradoxical sleep in a subject in need thereof, e.g. in an elderly subject, comprising administering to said subject a therapeutically effective amount of a somatostatin analogue as defined in claim 5 or a pharmaceutically acceptable salt thereof.

9. A pharmaceutical composition for use in any method according to any one of claims 5 to 8, comprising a somatostatin analogue as specified in claim 5 or a pharmaceutically acceptable salt thereof, together with one or more pharmaceutically acceptable diluents or carriers therefor.
10. Use, method or composition according to any one of claims 1 to 9, wherein the somatostatin analogue comprising an amino acid sequence of formula I is cyclo[{4-(NH<sub>2</sub>-C<sub>2</sub>H<sub>4</sub>-NH-CO-O-)Pro}-Phg-DTrp-Lys-Tyr(4-Bzl)-Phe] or a pharmaceutically acceptable salt thereof.